

# NATURAL HISTORY MISCELLANEA

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## A New Genus and Species of Diplopod (Family Xystodesmidae)

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It has become apparent that the millipeds assigned to the genus *Nannaria* comprise at least three separate groups which warrant generic recognition; accordingly the finding of a new species in Arkansas makes it desirable to propose a new genus to include one of these groups.

### *Castanaria*, n. gen.

A genus including species with spined sterna, unspined coxae, spined profemora, twisted claws, smooth tergites, and wide keels which formerly were included in the genus *Nannaria* (Chamberlin). The telopodite of the male gonopods consists of an elongated lateral blade to which there is attached a bifid dorsomedial basal piece, the two members of which are either subequal (*castanea*) or show great difference in size. The distal end of the telopodite is thin, keel-like, and crosses the midline. The bifid dorsomedial piece of the telopodite distinguishes it from species of *Nannaria*, in which the dorsomedial piece is simple.

Genotype: *C. depalmai*, n. sp. Other species are *castanea* (McNeill) from Monroe County, Indiana, and *davidcauseyi* (Causey) from Newton County, Arkansas. Each of these species is known from a very limited area.

### *Castanaria depalmai*, n. sp.

Figure 1

A smaller member of the genus, closely related to *davidcauseyi*, but distinguished from it by the aciculate process of the enlarged basal dorsomedial piece of the male gonopods.

*Male holotype.* Color undeveloped, but there are indications of pink or red triangles on the keels. Tergites of segments 6 through 15 almost same width; head narrow. Keels relatively wide and dorsum but slightly arched.

\*Fayetteville, Arkansas.

Tergites smooth. Length of collum 1.2 mm.; caudal margin almost straight, cephalic margin slightly convex, cephalolateral corners rounded and with distinct marginal ridges. All keels with thickened lateral marginal ridges, the ridges produced slightly caudad of the keels. Caudal margins of keels of

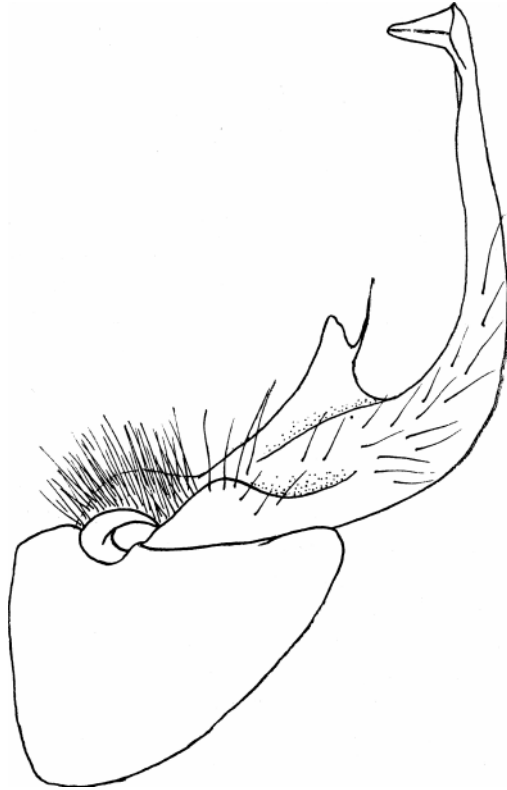


Figure 1. *Castanea depalmi*, n. sp. Left gonopod of male holotype, ventral view.

tergites 1 through 4 produced slightly cephalad; caudal margins of keels 5 through 14 more or less in line with the margin of rest of tergite except for the slightly sinuate medial region; keels of segments 15 through 18 produced caudad, becoming increasingly acute; keels of segment 19 are rounded lobes; anal tergite slightly truncate. Anal valves minutely wrinkled vertically, the mesal ridges well developed. Distance between coxae of last legs 0.45 mm., sternites becoming wider cephalad. Mesad to and adjacent to the second pair

of legs of each segment posterior to the sixth segment is a conspicuous, sharp sternal spine; a similar but smaller spine is at the base of the first legs on these segments. Mesad to each spine is a patch of 4 or 5 setae; the remainder of the sternite is glabrous. Legs 5 through 20 with prefemora spined. Claws of legs 1 through 15 are sinuous. Sternite between fourth pair of legs is in the form of a pair of blunt pyramidal processes.

Gonopodal opening broadly oval, the margin raised caudad and laterad. *In situ* the gonopods are directed cephalad, reaching the base of the fifth legs, with the lateral or main blades crossing in midline about one-third of the distance from the distal end. Telopodite of gonopods consists of an elongated lateral blade with a dorsomedial triangular piece extending from its base to about midway of its length. Distally the lateral blade is thin and keel-like, attached as in *davidcauseyi* at a right angle to the flattened blade. On the cephalic margin of the triangular piece is an acuminate process.

Length 17.5 mm., width 3.6 mm. B-C-H of segment 14 .2-1.6.

The *female allotype* agrees in general with the male holotype except in the following: length 19.3 mm., width 4 mm.; there are no setae on the sternites or processes between the fourth pair of legs.

*Locality.* Arkansas, Carroll County, on an east hillside about 0.2 mile south of Lake Leatherwood. The site is covered with limestone fragments, a sparse growth of deciduous trees, and drifts of leaves. The collection, 3 males and 8 females, was made by Dr. Thomas De Palma, Sept. 19, 1950. I collected a female and a larva of 19 segments from the same site May 23, 1950.

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